

Self-assessment report

ROMANIA 2025

Self-assessment report – ROMANIA - EQAVET Peer Review on the topic of 'Methodology and indicators for monitoring and evaluating public policies in the field of initial vocational education and training'

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1.Introduction – The peer-review exercise in ROMANIA

The main topic of this peer-review exercise hosted by the National Centre for TVET Development (CNDIPT), the public agency dedicated to initial vocational education and training in Romania, is focused on the *Methodology and indicators for monitoring and evaluating public policies in the field of initial vocational education and training (IVET)*.

This topic reflects the current priorities in the initial VET policy agenda, part of a wider change process of the education system in Romania, in particular, related to the new *Educated Romania* reform process and the new education law for the pre-university level (including pre-primary, primary and secondary education levels).

The main purpose of this report is to support this peer-review exercise that will be conducted in Romania in the period February-April, with the online meeting scheduled for 19-20 March. As presented in the concept note, the main question organising this initiative is the following: How could we improve the efficiency and quality of the methodologies and indicators used to monitoring and evaluating public policies in the field of initial vocational education and training (IVET) in Romania?

Specific questions are:

- What recommendations can be provided regarding the selection of indicators, data collection, and presentation of indicators to ensure effective monitoring and evaluation of public policies in the IVET field?
- How can the existing mechanism to evaluate IVET policies be further improved, and how can it be applied to any policy in the field of IVET? How can it be used by VET providers to improve their performance?
- How can we improve the response rate for qualitative indicators collected through surveys on a digital platform?
- Which are the success factors regarding the establishment of systemic links between data collection, review and planning?

The pilot experiences in Romania highlight the importance of mechanisms developed for monitoring and evaluating public policies in the field of professional training. The mechanism currently used to monitor and evaluate IVET public policies benefits the IVET system by improving strategic planning. This includes embracing early the necessary measures and actions to adjust VET policies, and aiming for a better alignment between labour market demand and VET supply, both quantitatively (planning the supply of qualifications and territorial distribution) and qualitatively (adapting the curriculum and its implementation methods at the national, regional and local levels, including county and school levels).

However, the complexity and scale of the mechanism being implemented at present brings challenges such as the available resources (human, financial, informational, time, etc.), coordinating multiple institutional actors with responsibilities for the mechanism's implementation, quantitative and qualitative data collection, and the active involvement of

students, parents, teachers, and company representatives - all influencing the reliability of the results obtained.

In this context, the results of the peer review should help to increase the efficiency and relevance of the mechanism as well as to identify examples of good practices, strengths and weaknesses from developments in other states in terms of monitoring and evaluating public policies in the field of initial vocational education and training (IVET), in order to improve the developed mechanisms in Romania.

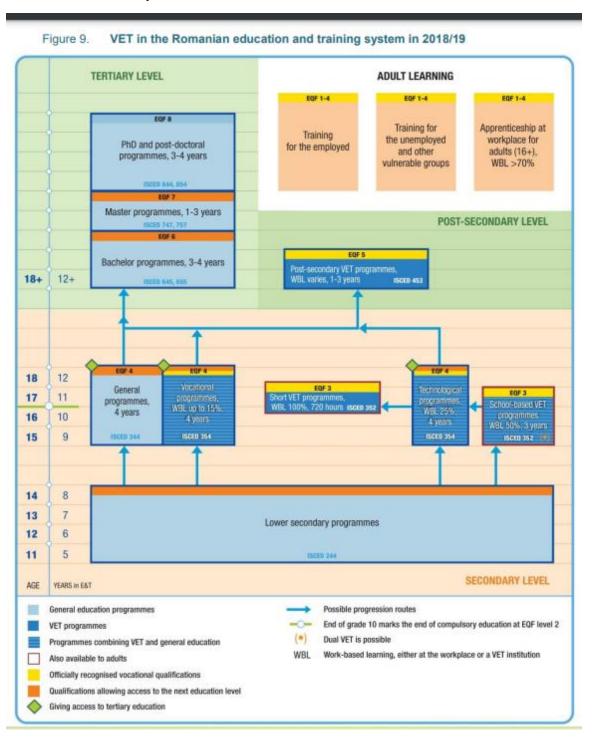
In addition to the information offered in this report, the peer reviewers will also be in contact with relevant representatives of CNDIPT and other experts involved in monitoring and evaluating public policies in IVET.

This report benefited from the direct support of Dana Stroie and Carmen Muşat, members of the QANRP project implementation team and from the review of international experts Marta Perich and Monika Auzinger, based on the self assessment report elaborated for the peer review that took place in 2023.

2. Specific context: IVET within the national education system

2.1. Background information

Current education system in Romania:



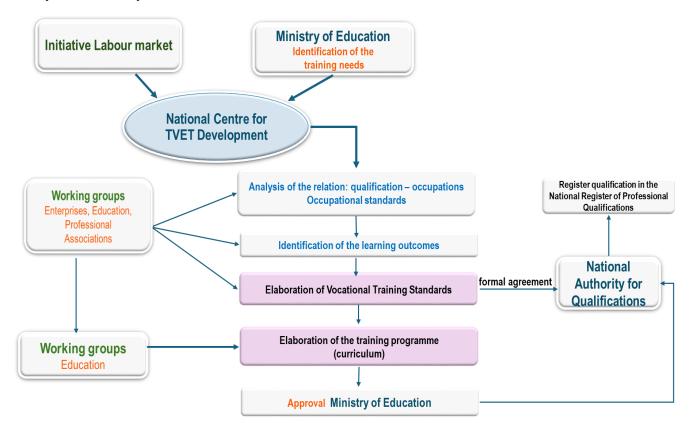
The constitution guarantees public education, including tertiary, free of charge.

General objectives, aims, principles, structure and organisation of the education and training system are described in the Pre-University Education Law (2023). It defines the following education levels:

- (a) early education (age 0 to 6):
- (i) the before pre-school level (age 0 to 3);
- (ii) pre-school education (age 3 to 6);
- (b) primary education (ISCED 1):
- (i) preparatory grade (age 6 to 7);
- (ii) grades 1 to 4 (primar);
- (c) secondary education:
- (i) lower secondary education (ISCED 2, grades 5 to 8) also called 'gymnasium' (gimnaziu);
- (ii) upper secondary education (ISCED 3) also called 'secondary superior education', comprising high school education, usually lasting 4 years; there are general programs and tehnological and vocational programs.
- (d) post-secondary VET programmes (ISCED 4, postliceu); including non-university tertiary education, lasting between 1 and 3 years.
- (e) higher education (ISCED 5-8).

In the case of technological high school education, primary beneficiaries have the right to receive a graduation diploma after 3 years and can participate in the professional qualification certification exam. After passing this exam, graduates receive a professional qualification certificate corresponding to EQF level 3. Graduates of the 3 years of study have the right to continue for another year of specialization and can receive, following an exam, a professional qualification certificate at EQF level 4. They can also take the baccalaureate exam and can continue, after obtaining the baccalaureate diploma, with university education. From the 2025-2026 school year, dual VET will be extended to level 4, and in the future it will also include levels 5.

The process of qualifications' elaboration in IVET



Actors and framework for inter-institutional cooperation in Initial Vocational Training:

The Government of Romania [according to the specifications on the website www.gov.ro]

□ approves policies and strategies in the field of education and vocational training;
□ proposes to Parliament, for approval, the education budget as part of the state budget;
□ approves, by Government decision, the standards, reference standards and performance indicators for the evaluation and quality assurance in pre-university and higher education and

The Ministry of Education (ME)¹

- designs, substantiates and applies the global education strategy, establishes the objectives of the education system as a whole, as well as the educational objectives by education levels and profiles;
- □ develops, coordinates and applies the national policy in the field of education;

the institutional evaluation and accreditation methodology.

According to the specifications of the Education Law 84/1995 with subsequent amendments and completions.

□ submits annually to Parliament the Report on the state of the national education system and simultaneously presents the directions and priorities for the development of pre-university and higher education.
National Center for TVET Development (CNDIPT) ²
develops the principles of educational policies and proposes strategies for the development of initial vocational training through the network of initial VETschool units.
\Box ensures the development and functioning of social partnership in vocational and technical education at national, regional and local levels
\Box ensures scientific coordination and develops methodologies for the development of the curriculum and the system for the evaluation and certification of qualifications in vocational and technical education;
\Box ensures scientific coordination and develops proposals regarding the training of teaching staff in vocational and technical education;
☐ ensures professional coordination and scientific consultancy to the body of national, regional and local authors and trainers in the vocational and technical education network;
\Box ensures the correlation at the level of principles and methodologies of the initial and continuous training of teaching staff in vocational and technical education;
nersures scientific coordination and develops, in collaboration with relevant institutions and partner structures at the national level, programs and projects in the field, in order to correlate the design and development of professional training standards, curriculum and assessment, as well as resource planning for vocational and technical education;
$\hfill \square$ ensures scientific coordination of innovation and development projects for vocational and technical education;
☐ designs and develops standards regarding the provision of equipment and material resources for vocational and technical education;
Romanian Agency for Quality Assurance in Pre-university Education (ARACIP) ³
□ develops, periodically updates and proposes to the Ministry of Education, the standards, reference standards and performance indicators for the evaluation and quality assurance in pre-university education and the institutional evaluation and accreditation methodology, which is approved by Government decision;
□ carries out, on a contractual basis, at the request of the Ministry of Education, the evaluation of the quality of education in pre-university education;

According to the specifications of Government Decision no. 855/1998 on the establishment of the National Center for the Development of Vocational and Technical Education, with subsequent amendments and additions.
 As specified in Law 87/2006 on quality assurance in education.

⁴ According to the specifications of GD. no. 1401/2009 on the establishment, organization and operation of the National Center for Evaluation and Examination with subsequent amendments and completions

⁵ DECISION No. 556 of May 25, 2011 on the organization, structure and functioning of the National Qualifications Authority.

☐ develops the criteria and procedures for the evaluation and certification of professional competence assessors, assessors of assessors and external assessors;
□ proposes to the Ministry of Education elements of national policies and strategies, normative acts relating to the national qualifications system and human resources development;
□ approves occupational standards with the opinion of the council and sectoral committees, coordinates and controls at the national level the development of occupational standards and professional training standards;
□ coordinates the authorization of centers for the evaluation of professional competences obtained in the non-formal and informal system and manages the national registry of centers for the evaluation of professional competences;
□ authorizes and monitors centers for the evaluation of professional competences; prints and manages certificates of professional competence, issued by authorized evaluation centers;
 evaluates and certifies professional competence assessors, assessors of assessors and external assessors;
☐ draws up the National Register of certified professional competence assessors, assessors of assessors and external assessors;
□ establishes the National Accreditation Center as a structure without legal personality with the aim of authorizing professional competence assessment centers, as well as accrediting assessment centers and assessment bodies.
Regional Consortia (CR) ⁶
□ develops/updates the Regional Education Action Plan (REAP);
□ assists/supports the County/Bucharest Municipality School Inspectorates and the Local Social Partnership Development Committees (CLDPS) from the counties of the development region for the development/update and implementation of the Local Education Action Plans (LEAPs);
☐ monitors the implementation of the LEAPs from the counties of the development region;
□ collaborates with other regional/county/local structures for the development/update, monitoring and implementation of strategic documents in the field of human resources and regional development.
<u>Local Social Partnership Development Committees</u> (CLDPS) ⁷ □ develops/updates the Local Action Plan for Education (PLAI);

 ⁶ Established by Order of the Ministry of Education and Scientific Research no. 4456/08.07.2015.
 ⁷ Funcţionează pe baza Ordinului Ministerului Educaţiei şi Cercetării Ştiinţifice nr. 4456/08.07.2015.

☐ monitors the implementation of School Action Plans (PAS) – strategic planning documents at the level of vocational and technical education units;
☐ analyzes and approves the proposals presented by the school inspectorate regarding the draft school plans for vocational and technical education, by educational units, fields of vocational training and qualifications;
provides the County/Bucharest Municipality School Inspectorate with the advisory opinion on the opportunity to authorize educational units for a new level of education/specialization/professional qualification in order to issue the general school inspector's approval of the Request for external evaluation;
□ participates, through designated representatives, in the committees established on the occasion of the certification exams of the qualification of vocational and technical education graduates, according to the regulations of the Ministry of Education;
□ proposes, on its own initiative or at the request of the school inspectorate, the modification/completion of the National Register of Qualifications/Nomenclatures of Professional Qualifications, for qualifications for which training is organized through IPT;
☐ approves the Local Development Curriculum (CDL) according to the regulations in force.
County School Inspectorates / Bucharest Municipality (ISJ/ISMB)
☐ carries out, together with ARACIP and the relevant departments of the Ministry of Education, the monitoring and quality control activity;
develops, at the end of each school year, the Report on the state of education in the county, respectively in the municipality of Bucharest, which is presented to the Ministry of Education, the prefecture, the county council, local councils and all educational units
VET Schools
☐ develops the School Action Plan and the Local Development Curriculum together with partner economic operators
☐ ensures and improves the quality of initial vocational training.

2.2. Recent programs and policies

Currently, Romania is strongly committed to achieving the objectives set at both European level through the *Council Recommendation of 24 November 2020 on Vocational Education and Training (VET) for sustainable competitiveness, social equity and resilience*8, and at the national level through education and training policies. In this respect, education and labour ministries developed and approved a National Implementation Plan for Initial and Continuous

⁸ Council of the European Union, Council Recommendation of 24 November 2020 on Vocational Education and Training (VET), https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020H1202(01)&from=EN

Vocational Education and Training to ensure a common frame of education and training-related actions.

The main VET priorities have not undergone major changes as they are focused on relevance to labour market needs, quality assurance inclusiveness and lifelong-learning-oriented approach. These main directions have been presently complemented by including green and digital transition determined by the latest technological development specific to industrial 4.0 progress, digital world and development trends in economy, occupations and environmental issues.

The vision for education, VET included, is presented in Educated Romania - vision and strategy 2018-2030, a national programming document in education, developed on three main pillars i) tailor—made teaching and learning process and quality assurance of the education and training process involving all students; ii) making the education and training system more flexible in order to respond concretely to the changing profiles and roles of the beneficiaries and actors involved and iii) adapting the system to external changes and future trends.

The objectives and targets will be achieved with the support of EU through the:

- Education and Employment Operational Program (EEOP) which focuses ESF interventions on major challenges in the field of education and employment,
- National Recovery and Resilience Plan (NRRP)9.

While there is not yet a distinct strategy for digitalisation or green transition, these priorities are integrated in EEOP and NRRP and linked to the priorities of the VET Recommendation, the European Skills Agenda, the Digital Education Action Plan (2021-2027), the European Green Deal and the Sustainable Development Goals.

At the national level, development and increase of the dual pathway has become the pillar of current and future IVET developments. New methodologies were developed and approved to support the extension of initial dual VET from level 3 to 4 and 5 EQF. Furthermore dual programmes will be introduced in Higher education, ensuring the continuity of this dual path for qualifications level 6-8 EQF. It is expected that companies' direct and substantial participation in the provision of dual initial will ensure increased participation and attractiveness by providing a multilevel support approach.

2.3. General SWOT

The main **strong points of the secondary education**, with a focus on initial vocational education and training system, are detailed below:

The design of teaching and learning curricula is based on learning outcomes.
 All training standards are designed following a clear, consistent, comparable structure:
 a list of units of learning outcomes expressed in terms of knowledge, abilities (competences) and attitudes, correlated with eight key competences in line with the present, specific European framework on key competences, a list of necessary equipment and the assessment standard. This ensures and facilitates better

⁹ Romanian National Recovery and Resilience Plan, approved by EU Council 28 October 2021, NRRP https://mfe.gov.ro/pnrr/

comparability with other education and training systems and provides a good, clear and transparent basis for analysis of competences for qualification recognition, on request, for labour market insertion in other EU Member States and/or for an easier analysis regarding additional competences to be achieved (through CVET programmes) to achieve a better professional status.

- A new set of quality assurance standards (approved by Government Decision no 994/2020) in pre-primary, primary and secondary education, including key areas such as learning outcomes; well-being of pupils and school staff; situation of the economically, educationally, culturally, ethnically or otherwise disadvantaged students (including students with disabilities / special educational needs), managerial and institutional capacity; professional capacity of teaching staff; combating discrimination on all grounds; ensuring minority rights and interculturality in school life; provision of equal opportunities for girls and boys.
- Quality and equity issues are now higher on the education policy agenda, including IVET to address structural inequalities, with new programs addressing the phenomenon of school drop-out (i.e. the National Programme for the Reduction of School Drop-out PNRAS, a programme to support participation in education, which is part of the "Romania Educated" Project and receives 543 million € through National Recovery and Resilience Plan; implementation of the Early Warning Mechanism in Education (EWM) in order to reduce absenteeism, improve assessment results, achieve a higher participation rate in national examinations, achieve a higher percentage of pupils completing compulsory education.
- There has been the reintroduction of the IVET 3-year programme with an important share of 50% WBL (work-based learning) out of the total programme, leading to EQF 3 level qualifications, (*învățământ profesional*), after a period of two years marked by the closure of School of Arts and Crafts.
- Introduction a complete dual pathway, covering levels 3-8 EQF. It started with a 3-year programme IVET programme in 2017-2018, and, from 2025 onwards is has been extended to levels 4, 5 (EQF) in IVET and to levels 6-8 EQF in higher education programmes. In IVET it is organised on companies' specific request who are more actively involved by providing: a dual IVET scholarship of at least the same amount as the "professional scholarship", work-based-learning for students with latest technological training equipment, other support measures (meals, transport and accommodation), as well as higher prospects of employability within the company after graduation.
- Active participation of company's representatives in the governance of IVET schools, as companies' representatives are nominated in the school administrative board and participate in the decision-making processes at the school level regarding education and training. Stronger cooperation between schools and companies is encouraged, involving local authorities in this strengthened three-partite Partnership Agreement.
- Specific financial incentives for IVET students to attend vocational education. All students enrolled in vocational education are addressed by the Professional Scholarship, a national social initiative that provides monthly financial assistance.

• Students in 4 year technological programmes receive "money for high school" scholarships that can be cumulated with either of the following financial support measures "merit scholarship"/ "study scholarship"/ "social scholarship".

Some of the current **weak points** of secondary education, including IVET schools (technological high schools, professional schools) include:

- Low share of education expenditures in GDP (lowest among EU countries); lower share of education budget offered to secondary education compared with other education levels (i.e. higher education); low capacity of education budget to cover relevant investments in IVET (more than 80% of the financial resources cover mainly staff salaries); majority of local authorities have a limited capacity to cover other than running costs; complimentary funding (off-budget) from private sector lower than expected in IVET; reduced number of private IVET schools, and insufficient autonomy and capacity of schools in the use of resources (human, material, financial).
- Limited managerial capacity to ensure the infrastructure, resources, and effective leadership to support the teaching staff to obtain and improve the learning results and the well-being of the child/student. The ARACIP monitoring of quality indicates that Quality Management is the least achieved, as the degree of achievement of the aggregate indicators related is below 60%. Consequently, the managerial capacity to improve one's managerial capacity (planning, organizing, monitoring, evaluation) is low. This hinders improving learning results, the well-being of the child/ student, the professional capacity of teaching staff and the institutional capacity and the school manager's communication skills with the beneficiaries of education, with other institutions and decision-making levels within the education system and community involvement in the school's activities optimizing the educational offer, in particular in relation with the monitoring of the school insertion.
- Insufficient monitoring institutional capacity, both at school, county and national level, limited access to relevant education data, important both for grounding and/ or assessing various interventions, including IVET.
- The educational infrastructure remains precarious and insufficiently correlated with the needs of schools, which must be safe, modern, digitised and green, according to current standards in the field. It is not adapted to recent demographic changes, centred on population growth in the suburbs around big cities and general decline in most other environments. At the same time, there are schools that operate in two or even three shifts and schools that no longer have enough pupils to constitute study groups. In some cases, classes are held simultaneously, with a negative impact on the quality of teaching;
- In the PISA international assessment, the level of proficiency in reading, mathematics and science places Romanian 15-year-olds at the bottom of the European Union. Of these, 44% are defined as functionally illiterate; there are also high differences in learning outcomes by area of residence, with a clear disadvantage of students and schools from rural area

- **Social infrastructure** is critical, as the supply of boarding schools is in many cases limited or worn out. There is a lack of pre-university school campuses, which limits access to educational provision for many pupils.
- There is a low socio-economic status of families, especially those in rural areas, to support students continue their studies and reduce the risk of dropping out.

Some recent **opportunities** for IVET include:

- Higher involvement of private sector and non-governmental representatives in promoting IVET (see for example the initiatives One Voice, Jobs of the Future).
- New opportunities for improving education and training offer and programmes
 to labour market needs with the support of ESF funds in key areas, including
 developing new qualifications and facilitating the necessary legal frame for their
 approval and introduction in National Register of Qualifications, development of
 specific professional training standards for the new qualifications, updating/revising
 existing professional training standards in accordance with labour market economic,
 digital and environmental requirements, update/revision of professional training
 standards for level 5EQF
- The process for the introduction of new IVET qualifications needed on the labour market has been simplified and CNDIPT offers support and guidance to private sector representatives to initiate such requests (new qualifications currently are introduced).
- CNDIPT has started in December 2024 a 3 years a systemic project, aiming to revise all IVET qualifications level 3 and 4 EQF, to develop a mechanism for quality assurance of work-based-learning, to digitize, simplify and optimize all processes through which companies will become partners in dual VET and to develop entrepreneurial skills among students
- CNDIPT will start in the first semester of 2025 the implementation of a Support
 measure programme for dual VET, funded by the second Swiss contribution, aiming
 to make an analysis of public policies in the field of dual VET, to revise all IVET
 qualifications level 5 EQF, to pilot the implementation of dual VET level 5 EQF, to
 provide professional training for VET teachers and methodological and pedagogical
 training for tutors and to set up a network of facilitators from the educational and
 economic environment in order to support the regional development of dual VET.

Some of the most important **threats** include:

• An imminent decrease of qualified teachers, VET teachers included, as Romania, like other EU Member States confronts with ageing of teaching staff at all levels. The prospects of a teaching career are, in most cases not a first option but a temporary, back-up solution for HE graduates mostly because of financial reasons.

- Romania's population is shrinking and ageing, a phenomenon which is particularly marked in many rural areas. The educational process in regions facing accelerated demographic decline presents particular problems.
- The lack of quality and prestige of vocational and technical education persists, as well as its insufficient link with the labour market; there is a clear lower attractiveness of IVET programmes compared with the general education (high school track) as they are not sufficiently promoted within the guidance and orientation classes in lower secondary school levels. For this more campaigns need to be organised and companies invited to present the opportunities to have a professional qualification and a job in a friendly, competitive professional environment.
- High rate of child poverty, a particularly high number of births to teenage mothers (around 20,000 per year) and social problems caused by the impact of circular migration on families;
- **Insufficient analysed training needs for VET teachers**, in particular, related to technological and new labour market trends.
- Limited interest of in-company tutors training to comply with specific requirements in terms of pedagogical competences; insufficient trainers of trainers to promote upskilling programs for in-companies tutors who are in charge with incompany training of IVET students.
- Insufficient use of ICT tools in IVET and insufficient support of companies in offering digital learning resources for different technological processes, simulation platforms, etc.

3. Monitoring and evaluating public policies in the field of initial vocational education and training (IVET)

3.1. Critical review of existing experience

Background information

Before 2023, when the mechanism for monitoring and evaluating public policies in the field of vocational training and active measures was developed and the basic structure of the ReConect platform was builthe *Report on the state of pre-university education in Romania* monitored and evaluated the state of education, which was prepared annually by the Ministry of Education. The data was collected from the portal of the Ministry of Education - Integrated Education Information System in Romania (SIIIR), from the portal of the National Institute of Statistics (INS) - INS Tempo, and from the centralized data collected from the School Inspectorates and National Centre for TVET Development (CNDIPT). The report analyzed the pre-university education system from the perspective of the basic indicators, in the following areas:

- Human resources
- Results and internal efficiency of the pre-university education system
- Results and external efficiency of the pre-university education system
- Situation of vocational education and training from the perspective of European indicators
- Main actions carried out and results obtained
- Teaching career
- Management and governance of the education system
- Financing of pre-university education
- Infrastructure of the education system
- Competency-based curriculum and assessment
- Promotion of STEM education
- Digitalization
- Vocational and technical education

The quantitative data analysis is carried out by determining the values of some indicators for the reference school year of the report, as well as their variation over a time series. The basic indicators used in the report are foundin the National System of Education Indicators (SNIE). SNIE is compatible with international indicator systems (Eurostat, OECD, UNESCO, World Bank) and includes some of the target indicators specific to the common European objectives in the field of education and vocational training.

The data collection process is sometimes difficult to achieve and the final results depend on the source of information and the quality and accuracy of the information. The school appoints a person responsible for the registrations in the SIIIR. The registration task is included in the job description. The appointed person does not always have additional training for this job; therefore, the registrations are not always complete and correct. There are, in theory, 3 levels of verification of the registrations: the school, the school inspectorate and the Ministry of education. The school inspectorates must monitor and verify the registrations made by the school.

The mechanism for monitoring and evaluating public policies in the field of vocational training and active measures

Through the project ReCONECT - Adaptation to Change - Integrated Mechanism for Anticipating, Monitoring, and Evaluating the Labour Market and Education (ReCONECT) (implemented between 24 December 2020 and 23 December 2023), a mechanism for monitoring and evaluating public policies in the field of vocational training and active measures was developed. This mechanism includes a set of quantitative and qualitative indicators organised by policy areas and fields of interest, which will be further explained in the following section.

The project also involved building the basic structure of the ReConect platform, an **electronic platform** for interconnecting electronic databases in education and vocational training and the labour market.

Current issues of the ReConect platform that will be resolved in a later approach:

- The ReConect platform is not functional for public approaches. The interface with the general public is not available. The list of public indicators and their evolution over time cannot be accessed yet.
- Slow STS authorization process for experts from public institutions who have data use and processing status on the platform.
- Problems with the interconnection of existing databases from the labour market and education (different formats and protocols).
- Quality and accuracy of existing data. Although there are various levels of data verification, these are not always the real and correct ones.
- Problems with GDPR.
- Interconnection with the INS is only partially achieved. The INS databases could be the key to control.

3.2. Indicators for the monitoring and evaluation mechanism of public policies in the field of initial vocational training

As mentioned above, the mechanism includes a set of **quantitative and qualitative indicators** organised by policy areas and fields of interest. Data for the quantitative indicators is collected through the Integrated Information System of Education in Romania (SIIIR) – an online platform for managing all resources and data used in preuniversity education in Romania and from the online data platform of the National Institute of Statistics. Qualitative

data is collected via questionnaires that are available on an online platform that can be accessed anonymously by all respondents (students, teachers, parents and companies). In order to access the questionnaire, the respondents receive an email with the link to the online platform. Currently, despite the joint efforts at national and local levels, the rate of responses remains low.

The data for the indicators developed in the mechanism is collected and processed through the electronic platform for interconnection of existing databases, ReConect. A large part of the indicators will be public, with the possibility of being selected for a certain period of time, for a certain region, according to certain variables so that a specific report can be built for a certain public policy for the development of VET.

For each indicator in the public policy monitoring and evaluating mechanism, a descriptive sheet was developed that includes:

- Indicator name
- Indicator code
- Definition
- Purpose
- Unit of measurement
- Data source/institution collecting the data
- Required microdata
- Calculation method and calculation formula
- Data collection periodicity
- Geographical coverage
- Degree of disaggregation by variables
- Institutions using it
- Quality standards and limits

The main indicators for the mechanism for monitoring and evaluating public policies in the field of IVET, with analysis for the period 2016-2020:

Indicator name/ year	2016	2017	2018	2019	2020
DEM1 Resident population	19.706.424	19.592.933	19.483.840	19.375.835	19.269.469
DEM2 Resident school-age population, age group 15-21 years	651.527	637.099	621.980	614.018	618.934
ECON1 General dynamics of the economy - Active local units	541.663	568.589	591.500	606.390	640.104
ECON2 General dynamics of the economy – NETE investments (million lei)	75.351	76.708	86.601	101.119	95.645
ECON3 . Newly created enterprises, total	97.887	109.268	112.403	112.127	103.116
ECON3a - Newly created enterprises with less than 10 employees	96.598	107.948	111.203	110.801	102.042

ECON3b - Newly created	1.289	1.320	1.200	1.326	1.074
enterprises with over 10					
employees					

Indicator name/ school	School year				
year	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
IPT 1. Economic operators submitting requests for schooling of students through vocational education	3647	5597	-	-	-
IPT 2. Economic operators submitting requests for schooling of students through dual vocational education	227	527	775	1259	512 ¹⁰
IPT 3. Places requested by economic operators for the education of students through vocational education	34440	43105	41691	43075	31362
IPT 4. Places requested by economic operators for the education of students through dual vocational education	3467	5974	8531	8344	6168
IPT 8. Basic areas/Areas of	NA	NA	NA	NA	17 areas (level 3) 19 level 4) 25 (level 5)
professional training and professional qualifications existing in the RNCP/nomenclature	NA	NA	NA	NA	professional qualifications (level 3) 69 (level 4) 203 (level 5)
IPT 9. Newly developed/revised professional qualifications to be taught through IPT (for each CNC (NQF) qualification level)	NA	NA	NA	NA	0
IPT 10. Share of newly developed/revised professional qualifications for VET education, out of the total professional qualifications of CNC (NQF) levels 3, 4 and 5 registered in the RNCP/nomenclature	NA	NA	NA	NA	0%
IPT 11. Places included for each CNC (NQF) level 3, 4 and 5 professional qualification, in the VET tuition plan	35829 cls.IX level 3 667 cls.IX level 3 dual 61070 cls.IX level 4 technological 47364	31570 cls.IXlevel 3 4470 cls.IX level 3 dual 59185 cls.IX level 4 technological 44237	40358 cls.IX level 3f 7389 cls.IX level 3 dual 51176 cls.IX level 4 technological 43098	39751 cls.IX level 3 7367 cls.IX level 3 dual 53980 cls.IX level 4 technological 43342	28783 cls.IX level 3 5284 cls.IX level 3 dual 43145 cls.IX level 4 technological 43022

¹⁰ The restrictions imposed by the Covid 19 pandemic led to a decrease in the number of companies that requested dual schooling; companies did not assume physical interaction

	anul I post-	anul I post-	anul I post-	anul I post-	anul I post-
	secondary	secondary	secondary	secondary	secondary
	(level 5)	(level 5)	(level 5)	(level 5)	(level 5)
IPT 12. The degree of	104,03%	73,24%	96,80%	92,28%	91,78%
satisfaction of economic	level 3	level 3	level 3	level 3	level 3
operators' requests for		107010	10 101 0	10 7 01 0	101010
vocational education,	19,24%	74,82%	86,61%	88,29%	85,67%
including dual	level 3 dual	level 3 dual	level 3 dual	level 3 dual	level 3 dual
including dual	04.700/	04.400/	0.4.500/	07.400/	04.000/
	91,73%	94,18%	84,58%	87,48%	91,20%
	level 3	level 3	level 3	level 3	level 3
	81,86%	92,57%	93,59%	89,59%	87,17%
	level 3 dual	level 3 dual	level 3 dual	level 3 dual	level 3 dual
IPT 13. Degree of	93,52%	96,24%	99.00%	99.52%	94,13%
achievement of the schooling	level 4	level 4	level 4	llevel 4	level 4
plan in VET	technological	technological	technological	technological	technological
	81,10%	91,58%	87,56%	86,71%	88,10%
	post-	post-	post-	post-	post-
	secondary	secondary	secondary	secondary	secondary
	(level 5)	(level 5)	(level 5)	(level 5)	(level 5)
	2018	2019	2020	2021	2022
IPT 14 Standard cost/student	4.768	5.754	6.498	6.562	6.871
(Ron)	7.700	J. 7 J.	0.730	0.002	0.071
IPT 14a Standard	4.413	5.384	6.111	6.111	6.386
cost/student with salaries,	4.413	5.304	0.111	0.111	0.300
,					
bonuses, allowances and					
other salary rights of					
education personnel (Ron)					
IPT 14b Standard	355	370	387	451	485
cost/student with professional					
training of education staff,					
periodic assessment of					
students and goods and					
services (Ron)					
	2015	2016	2017	2018	2019
IPT 15. Total public	2,72	2,58	2,69	2,82	3,16
expenditure on education			_, -,	_,	-,
oxponditure on outdouten					
(million Ron)	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
(million Ron)	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
(million Ron) IPT 16. Teaching staff in VET	15513	14983	14604	14223	13650
(million Ron)	15513 level 4	14983 level 4	14604 level 4	14223 level 4	13650 level 4
(million Ron) IPT 16. Teaching staff in VET	15513 level 4 technological	14983 level 4 technological	14604 level 4 technological	14223 level 4 technological	13650 level 4 technological
(million Ron) IPT 16. Teaching staff in VET	15513 level 4 technological 1155	14983 level 4 technological 1542	14604 level 4 technological 1499	14223 level 4 technological 1566	13650 level 4 technological 1430
(million Ron) IPT 16. Teaching staff in VET	15513 level 4 technological 1155 level 3	14983 level 4 technological 1542 level 3	14604 level 4 technological 1499 level 3	14223 level 4 technological 1566 level 3	13650 level 4 technological 1430 level 3
(million Ron) IPT 16. Teaching staff in VET	15513 level 4 technological 1155 level 3 înv.	14983 level 4 technological 1542 level 3 înv.	14604 level 4 technological 1499 level 3 înv.	14223 level 4 technological 1566 level 3 înv.	13650 level 4 technological 1430 level 3 înv.
(million Ron) IPT 16. Teaching staff in VET	15513 level 4 technological 1155 level 3 înv. profesional	14983 level 4 technological 1542 level 3 înv. profesional	14604 level 4 technological 1499 level 3 înv. profesional	14223 level 4 technological 1566 level 3 înv. profesional	13650 level 4 technological 1430 level 3 înv. profesional
(million Ron) IPT 16. Teaching staff in VET	15513 level 4 technological 1155 level 3 înv. profesional 1879	14983 level 4 technological 1542 level 3 înv. profesional 1986	14604 level 4 technological 1499 level 3 înv. profesional 1863	14223 level 4 technological 1566 level 3 înv. profesional 1761	13650 level 4 technological 1430 level 3 înv. profesional 1840
(million Ron) IPT 16. Teaching staff in VET	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv.	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv.	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv.	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv.	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3
(million Ron) IPT 16. Teaching staff in VET	15513 level 4 technological 1155 level 3 înv. profesional 1879	14983 level 4 technological 1542 level 3 înv. profesional 1986	14604 level 4 technological 1499 level 3 înv. profesional 1863	14223 level 4 technological 1566 level 3 înv. profesional 1761	13650 level 4 technological 1430 level 3 înv. profesional 1840
(million Ron) IPT 16. Teaching staff in VET by education levels	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3
(million Ron) IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6%	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8%	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1%	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1%	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3%
(million Ron) IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified teachers teaching vocational	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4
(million Ron) IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological
(million Ron) IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified teachers teaching vocational	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological 95,2%	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological
(million Ron) IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified teachers teaching vocational	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological 88,6% level 3 înv.	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological 94,2% level 3	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological 95,5% level 3	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological 95,2% level 3	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological 93,9% level 3
(million Ron) IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified teachers teaching vocational	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological 95,2% level 3 înv.	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological 93,9% level 3 înv.
(million Ron) IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified teachers teaching vocational	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological 88,6% level 3 înv.	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological 94,2% level 3	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological 95,5% level 3	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological 95,2% level 3 înv. profesional	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological 93,9% level 3
(million Ron) IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified teachers teaching vocational	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological 88,6% level 3 înv.	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological 94,2% level 3	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological 95,5% level 3	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological 95,2% level 3 înv. profesional 95,3%	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological 93,9% level 3 înv.
(million Ron) IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified teachers teaching vocational	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological 88,6% level 3 înv. profesional	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological 94,2% level 3 înv.profesional	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological 95,5% level 3 înv. profesional	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological 95,2% level 3 înv. profesional 95,3% level 5	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological 93,9% level 3 înv. profesional
(million Ron) IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified teachers teaching vocational	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological 88,6% level 3 înv. profesional 94,1% Level 5 înv.	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological 94,2% level 3 înv.profesional	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological 95,5% level 3 înv. profesional	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological 95,2% level 3 înv. profesional 95,3% level 5 înv.	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological 93,9% level 3 înv. profesional
IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified teachers teaching vocational and technical education	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological 88,6% level 3 înv. profesional 94,1% Level 5 înv. postliceal	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological 94,2% level 3 înv.profesional	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological 95,5% level 3 înv. profesional	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological 95,2% level 3 înv. profesional 95,3% level 5 înv. postliceal	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological 93,9% level 3 înv. profesional
IPT 17. Share of qualified teachers teaching vocational and technical education	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological 88,6% level 3 înv. profesional 94,1% Level 5 înv. postliceal	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological 94,2% level 3 înv.profesional	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological 95,5% level 3 înv. profesional 96,3% level 5 înv. postliceal	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological 95,2% level 3 înv. profesional 95,3% level 5 înv. postliceal	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological 93,9% level 3 înv. profesional 96,6% level 5 înv. postliceal
IPT 16. Teaching staff in VET by education levels IPT 17. Share of qualified teachers teaching vocational and technical education	15513 level 4 technological 1155 level 3 înv. profesional 1879 îlevel 3 nv. postliceal 98,6% level 4 technological 88,6% level 3 înv. profesional 94,1% Level 5 înv. postliceal	14983 level 4 technological 1542 level 3 înv. profesional 1986 level 3 înv. postliceal 98,8% level 4 technological 94,2% level 3 înv.profesional	14604 level 4 technological 1499 level 3 înv. profesional 1863 level 3 înv. postliceal 99,1% level 4 technological 95,5% level 3 înv. profesional	14223 level 4 technological 1566 level 3 înv. profesional 1761 level 3 înv. postliceal 99,1% llevel 4 technological 95,2% level 3 înv. profesional 95,3% level 5 înv. postliceal	13650 level 4 technological 1430 level 3 înv. profesional 1840 level 3 înv. postliceal 99,3% level 4 technological 93,9% level 3 înv. profesional

Γ	l .	1	1	ı	1
post-secondary education (post-secondary school and	15 level 5	14	14	14 level 5	14
foreman school) who report to	înv.	level 5	level 5	înv.	level 5
a specialized teacher from VET	postliceal	înv. postliceal	înv. postliceal	postliceal	înv. postliceal
IPT 19A. Educational units of					
high school education (level 4	713	698	681	674	669
NQF)					
IPT 19D. Educational units					
that provide vocational	647	744	788	818	835
education (NQF level 3)	047	/	700	010	000
IPT 19F. Educational units					
	161	166	165	160	160
that provide post-secondary	101	100	100	163	160
education (NQF level 5)					
IPT 20. Educational units					
providing vocational training	116	131	199	228	247
programs in dual vocational	110	101	155	220	271
education					
IPT 21. Students enrolled in	179.241	182.797	183.877	148.879	168.582
8th grade, middle school	87.515 F	89.070 F	89.976 F	71.203 F	82.311 F
education	82.728 R	81.708 R	76.327 R	62.735 R	72.910 R
IPT 22. Transition rate in	31,32%	31,07%	26,84%	28,97%	26,80%
	30,45% F ¹¹			27,98% F	
technological high school		30,31% F	26,44% F	,	26,41% F
education	32,16% M ¹²	31,80% M	27,22% M	29,92% M	27,15% M
IPT 23. Transition rate in	17,41%	17,55%	22,26%	21,49%	19,14%
vocational education	11,50 %F	11,66%F	16,13%F	15,39%F	13,25%F
including dual	23,08 %M	23,17 %M	28,09 %M	27,34 %M	24,54 %M
IDTOO D. T	0,29%	2,22%	3,66%	3,49%	2,92%
IPT23.B. Transition rate in	0,11% F	1,14% F	1,91% F	1,80% F	1,40% F
dual vocational education	0,47% M	3,25% M	5,33% M	5,10% M	4,31% M
	633109 Total	626722 Total	613889 Total	616686 Total	592778 Total
IPT 24. Students enrolled in	317693	315261	312822	314738	304246
high school education by	Teoretic	Teoretic	Teoretic	Teoretic	Teoretic
educational track	51044	51706		54599	54359
			52921		
(number of students)	Vocaţional	Vocational	Vocațional	Vocaţional	Vocațional
	264372	259755	248146	247349	234173
	Tehnologic	Tehnologic	Tehnologic	Tehnologic	Tehnologic
IPT 25 A – Share of students	50,18%	50,30%	50,96%	51,04%	51,33%
enrolled in theoretical high	-			,	·
school education, out of total	55,27% F	55,06% F	55,96% F	55,41% F	55,39% F
students enrolled in high	34,80% R ¹³	34,61% R	36,06% R	36,95% R	37,36% R
school education	34,00 /0 K	34,0170 K	30,00 /0 K	30,9370 K	31,30 % K
IPT 25 B – Share of students	8,06%	8,25%	8,62%	8,85%	9,17%
enrolled in vocational high	0,0070	0,2370	0,0270	0,0070	3,17 70
school education, out of total	7,94% F	8,27% F	7,88% F	9,10% F	9,53% F
students enrolled in high					,
school education	2,18% R	2,36% R	2,40% R	2,40% R	2,53% R
IPT 25 C – Share of students	44.700/	44.4507	40.4007	40.4407	00.500/
enrolled in technological high	41,76%	41,45%	40,42%	40,11%	39,50%
school education, out of total	36,78% F	36,67% F	35,77% F	35,48% F	35,08% F
The state of the s					
students enrolled in high	63,01% R	63,03% R	61,54% R	60,65% M	60,11% R
school education	00.500	00.500	400.040	400 770	405 500
IPT 26. Students enrolled in	90.502	90.593	100.916	109.778	105.566
vocational education,	28.375 F	28.885 F	33.655 F	37.448 F	36.221 F
including dual, (in NQF level					
3 training programs)	14.601 R	14.329 R	15.231 R	16.175 R	15.123 R

¹¹ F - Females

¹² M- Males

¹³ R - Rural

IDT 074 Otted and a conclusation	1 740	L 5 504	10.504	45.050	I 40 040 I
IPT 27A Students enrolled in	742	5.594	12.564	15.856	16.049
dual education, by gender and area of residence, unit	109 F 45 R	1.414 F 198 R	3.085 F 553 R	3.791 F 707 R	3.793 F 827 R
and their weights.	45 K	198 K	553 K	707 K	827 K
IPT 29. Students enrolled in	86.160	90.258	90.347	90.506	88.642
post-secondary education (in	57.704 F	61.808 F	62.559 F	63.613 F	62.971 F
NQF level 5 training programs)	6.569 R	6.863 R	6.828 R	6.544 R	6.274 R
IPT30A. Share of students enrolled in post-secondary	66,97% F	68,5% F	69,24% F	70,3% F	71% F
school by gender and area of residence	7,62% R	7,6% R	7,5% R	7,23% R	7,10% R
IPT30A. Share of students enrolled in foremen's school	7,36% F	8,90% F	10% F	10,12% F	9,97% F
by gender and area of residence	13,37% R	12,74% R	11% R	9,5% R	9,35% R
IPT 31 – Gross enrollment	30.69%	30.87%	29.94%	30.29%	28.37%
rate in technological high	28.86% F	29.14% F	28.34% F	28.79% F	26.95% F
school education	5.59% R	5.55% R	5.25% R	5.26% R	5.02% R
IDT 22 Gross carelment reta	14,21%	14,57%	16,42%	17,74%	16,58%
IPT 32. Gross enrolment rate in vocational education	9,17% F	9,56% F	11,29% F	12,49% F	11,71% F
iii vocatioriai education	4,15% R	4,19% R	4,57% R	4,92% R	4,59% R
IPT 33. Gross school	0,12%	0,90%	2,04%	2,56%	2,52%
enrolment rate in dual	0,04% F	0,47% F	1,03% F	1,26% F	1,23% F
education	0,01% R	0,06% R	0,17% R	0,21% R	0,25% R
IPT 34A. Gross enrolment	13.76%	14.51%	14.57%	14.69%	
rate in post-secondary	18.53% F	20.4% F	20.78% F	21.31% F	
education by gender and area of residence unit	1.97% R	2.04% R	2.02% R	1.94% R	
IPT 34. Gross enrollment rate	0.81%	0.77%	0.83%	0.8%	
in foremen's school, by	0.12% F	0.14% F	0.17% F	0.167% F	
gender and unit residence area	0.2% R	0.18% R	0.17% R	0.14% R	
IPT 37 A. Educational units	29 R	28 R	24 R	12 R	26 R
with provisionally authorized	26 înv. prof.	29 inv. prof.	14 inv. prof.	6 inv. prof.	21 inv. prof.
vocational training programs,	37 înv. liceal	29 înv. liceal	22 înv. liceal	20 înv. liceal	21 înv. liceal
by educational level and area	104 înv.	84 înv.	74 înv.	56 înv.	82 înv.
of residence	postliceal	postliceal	postliceal	postliceal	postliceal
IDT 07 D. Edwardianal	283 R	277 R	272 R	266 R	261 R
IPT 37 B. Educational	845 înv. prof.	835 înv. prof.	840 înv. prof.	852 înv. prof.	854 înv. prof.
institutions with accredited vocational training programs,	882 înv.			873 înv.	
by educational level and area	liceal	874 înv. liceal	875 înv. liceal	liceal	872 înv. liceal
of residence	486 înv.	492 înv.	500 înv.	504 înv.	509 înv.
or residence	postliceal	Postliceal	postliceal	postliceal	postliceal
IPT 38. Educational units in IPT that have active training companies on the ROCT platform (number of schools)				348	242
IPT 41. High school	142481	144347	142594	138945	129366
graduates (number of	9261 R	9059 R	8611 R	8275 R	7255 R
graduates)	74458 F	75759 F	74176 F	72334 F	68872 F
IPT 42. Graduates of	22784	22645	23448	24108	4124
vocational education,	3428 R	3517 R	3681 R	3622 R	727 R
including dual (number of	6608 F	6836 F	7304 F	7615 F	1550 F
graduates)	26153				
IPT 43A. Graduates of post-		25885	27837	29516	24865
secondary education, post- secondary school	18064 F 2030 R	18113 F 1998 R	19552 F 2177 R	21206 F 2231 R	16923 F 1546 R
Secondary School	2000 11	1990 11	2111 IX	22011\	107011

IPT 43B. Graduates of post-	2241	2067	2971	2433	1541
· ·					
secondary education,	162 F	167 F	264 F	240 F	97 F
foreman school	324 R	269 R	363 R	243 R	147 R
IDT 44 III I I	84,8% Filiera	86,2% Filiera	84,2% Filiera	85,8% Filiera	88,7% Filiera
IPT 44 – High school	teoretică	Teoretică	Teoretică	Teoretică	Teoretică
graduates with baccalaureate	76,2% Filiera	75,8% Filiera	77,2% Filiera	75,8% Filiera	77,1% Filiera
exam	Vocatională	Vocatională	Vocatională	Vocatională	Vocatională
(percent)	47.5% Filiera	50.1% Filiera	46.5% Filiera	51.1% F	58.0% F
	Tehnologică	Tehnologică	Vocatională	Tehnologică	Tehnologică
IPT 48 - School dropout rate of students enrolled in high school TECHNOLOGICAL education	4.24%	4.34%	0.83%	1.94%	
IPT 50A. Dropout rate in post- secondary education	10.7%	9.7%	8.9%	7.9%	7.5%
IPT 51. Early school leaving	Anul 2017	Anul 2018	Anul 2019	Anul 2020	Anul 2021
rate for upper secondary and	18.10 %	16.40 %	15.30 %	15.60 %	15.30 %
vocational education,	27.10 % R	25.40 % R	22.40 % R	23.00 % R	23.20 % R
including dual	18.10 % F	16.10 % F	15.80 % F	16.60 % F	15.50 % F

3.3. Specific SWOT

Public policies in IVET

Г	A				
	Str	'n	'n	noi	nts

a) General context

- Increase in investments over time in certain economic sectors: construction, IT, etc.
- Increase in the number of active local units in Education, Health and Social Assistance, Information and Communications, Construction
- Increase in the number of employees at the level of units with a small number of employees (between 0-9 people)
- Increase in the total number of newly established enterprises in the Construction and Manufacturing sectors
- Decrease in the ILO unemployment rate in 2017-2019

b) Management and planning of the initial vocational training offer

- Reintroduction of vocational education and its promotion, especially dual vocational education, led to an increase in the number of economic operators that requested the education of students through dual vocational education and the number of places requested for education through dual vocational education in 2017-2021
- Increase in the number of newly developed professional qualifications to be schooled through ipt
- Increase in the degree of satisfaction of economic operators that requested the education of students through dual vocational education

c) Capacity to provide initial vocational training programs

• Specialized teachers who teach in vocational and technical education are qualified with a percentage of 99.3% in technological high school

- education, 93.9% in vocational education and 96.6% in postsecondary education
- Increase in the number of vocational and technical education units that provide vocational training programs at level 3 of the National Qualifications Framework, including in the dual system
- Existence of mechanisms and programs intended for the continuous professional development of teachers
- Teachers in vocational and technical education are involved in developing partnerships with economic operators in the country and abroad to carry out practical training internships for students in order to adapt their training to the needs of the labor market

d) Management of the initial vocational training process

- Pre-university education units that provide accredited vocational training programs for vocational and technical education
- The number of students enrolled in dual education is increasing
- Ensuring relevant practical training, predominantly for economic operators in the case of vocational education, including dual, for the provision of CNC level 3 qualifications
- Increasing the interest of economic operators in getting involved in the initial vocational training process through dual education

e) Results and Impact of Initial Vocational Training

- Increase in the number of graduates of vocational education, including dual, from 22,784 in the 2017-2018 school year to 24,551 in the 2021-2022 school year
- Slightly increasing trend in the percentage of passing the baccalaureate exam
- Decreasing trend in the early school leaving rate so that in 2021 there is a decrease of 4.71% compared to 2017
- Willingness of parents and students to recommend the vocational training program and the school unit they attend

Weak points

a) General context

- Population decline including the school population
- Population aging, in all age groups but with a greater extent in the school-age population
- Overall decline in the industrial sector, the agricultural sector and the tourism sector and in the extractive industry;
- Decrease in the average degree of energy independence
- Decrease in the number of employees at the level of units with a number of over 10 employees
- Decrease in the number of newly created enterprises in the agricultural sector and in the field of Production and supply of electricity and heat, gas, hot water and air conditioning
- Gradual decrease in the share of the workforce in active enterprises newly created with foreign capital

• Decrease in the employment rate among young people in the age group 15 - 24 years, from 24.5% in 2017 to 21.2% in 2021

b) Management and planning of the initial vocational training offer

- The low level of promoting the benefits of vocational and technical education, part of the planned places not being occupied, leads to a decrease in students' interest in IPT
- The decrease in the number of students enrolled in IPT, which is not correlated with the number of places included in the schooling plan for vocational and technical education, to acquire professional qualifications of levels 3, 4 and 5 CNC
- Lack of career counseling and guidance

c) Capacity to provide initial professional training programs

- The decrease in the number of teachers in vocational and technical education requires significant investments in resources, infrastructure and professional training and retraining programs for teachers
- Attracting graduates of higher education institutions to develop a career in education
- Creating the framework for providing continuous professional development programs for teachers in vocational and technical education with the involvement of economic operators

d) Management of the initial vocational training process

- The transition rate in vocational and technical education, as well as the gross enrolment rate, are decreasing
- The tendency of middle school graduates is to opt for admission to continue their studies primarily in theoretical high school and less in vocational and technical education
- Increasing the relevance of the qualifications in the schooling offer in relation to the needs of the labour market, by updating qualifications including for post-secondary education
- Implementing through pre-university education quality, attractive, equitable and inclusive vocational training programs, focused on the needs of the student but also of the labour market and society in general
- Stimulating education actors to provide relevant feedback when requested

e) Results and Impact of Initial Vocational Training

- The low level of learning outcomes acquired by students entering technological high school education constitutes a major challenge for graduating from the baccalaureate exam
- Decrease in the number of high school graduates in school units in rural areas (a decrease of 31% in 2022 compared to 2018)

- Decrease in interest in post-secondary education (decrease in the number of post-secondary education graduates from 26,153 in the 2017-2018 school year to 24,865 in the 2021-2022 school year)
- High rate of early school leaving compared to the European average
- Considerable rate of school dropout, especially in rural areas
- Low standard of living and the level of culture of parents leads to abandonment and early school leaving, especially in rural areas
- Outdated technology in schools or its lack and lack of materials and raw materials for the practical training of students and the assessment of professional skills

Opportunities

a) Restructuring the initial vocational training system through the Pre-university Education Law

- Complete dual route (from EQF level 3 to EQF level 6)
- Creation of dual education consortia (art. 22) formed by: technological high schools, universities, economic operators, local public authorities
- Reducing school dropout (title I, chapter VIII, section 5): programs to reduce school dropout; mapping and identifying priority investment areas in education, defined in accordance with a specific methodology approved by order of the Minister of Education; establishment of coordination councils for priority investment areas in education.
- Right to transport and other facilities (title I, chapter VIII, section a 9a): right to free transport; free accommodation and meals for students staying in boarding schools; "Cultural Vouchers for Students" program.
- Digital transformations in pre-university education (title I, chapter IX, section a4a).
- Introduction of the technological scholarship, which will benefit all students in technological and dual technological education in the future

b) Supporting the initial vocational training system through internationally funded projects

- The existence of relevant financing measures through nonreimbursable funds to improve the education and vocational training process provided for in the National Recovery and Resilience Program of Romania, PNRR and in the Education and Employment Program, PEO.
- Financing measures for initial vocational education and training aim to:
 - ✓ Improving the correlation of the initial vocational training offer with the needs of the labor market
 - ✓ Increasing the attractiveness of vocational and technical education
 - ✓ Increasing participation and facilitating access to IVET
 - ✓ Improving the quality of IVET

Threats

• Insufficient institutional capacity of schools to collect and report accurate data, following the pilot methodology;

- GDPR framework not sufficiently clear, limiting access and use to relevant data
- Limited opportunities to organise training programs for all actors within the school in relevant fields for monitoring and evaluating public policies
- Reluctance of some public authorities to accept the inter-operability of data

Specific SWOT for the Mechanism for monitoring and evaluating public policies in the field of IVET

Strong points	 It is the first comprehensive platform for monitoring, anticipating and correlating the educational supply with the demand on the labor market in Romania the electronic platform interconnects electronic databases from education, employment and general labour market context it supports an evidence based policy in VET, by providing reports with data, in their historical evolution, on VET areas of interest the platform is user friendly and has a hogh speed of processing large data
Weaknesses	 All data multi-level collection actions constitute a very complex process as it brings together many respondents from various levels and data under different forms. This might create some overlapping situations and data processing and interpretation report might become difficult. The large volume of information and data providers may lead to delays in updating data on the ReConect platform. existing databases have different protocols and format, swhich might lead to communication errors the current data validation system may create some errors in the accuracy and completeness of the data low response rate for qualitative indicators, where data are collected via specific surveys among students, taechers, companies and other stakeholders
Opportunities	 support at decision makers level for the operationalisation and functioning of the mechanism development of IVET and especially of dual VET is a strategic governmental objective

	funds are availbale to continue in the coming years the further improvemet of the mechanism
Threats	 Romania is facing a strong budget deficit that could restrict the funds allocated for the improvement of the mechanism Lack of staff with responsabilities in assuring the full functionality of the ReCONECT platform and in making functional analisys of the VET policies &state amployment has been recently restricted due to the strong budget deficit)

3.4. Ideas and suggestions to improve the selection of indicators and data collection

- Motivating and endorsing accountability of the staff responsible at school level for entering data into SIIIR (Integrated Information System of Education in Romania).
- Campaigns to promote the benefits of constructive feedback among direct and indirect beneficiaries
- ➤ To support trasability of person's acroos education and employment, allocation of a personal code/number (different from the personal identification number) could facilitate the process.

4. Conclusions and points of interest for the peer review activity

The data included in this report demonstrates the importance of the Peer Review topic in Romania. The evaluation mechanism is **high on the policy agenda**, and is currently piloted at the national level, with the support of relevant national partners. Currently, only the basic structure of the ReConect platform for collecting and interconnecting existing databases is being developed, and this will be completed and improved in subsequent approaches. Additional points of interest concerning possible interventions to address current challenges in monitoring and evaluating public policies in the field of initial vocational training were raised:

- Public policies are in continuous transformation which requires a dynamic monitoring and evaluation mechanism.
- The identified indicators should be sufficient and can be applied in various contexts and for various vocational training policies.
- The existing electronic databases have different formats and the mechanisms for validating the correctness of the data and the quality of the records are not sufficient and efficient.
- Small response rate to the dynamic questionnaires administered online to students, graduates, teachers and other stakeholders by the dedicated Platform of CNDIPT.
- Limited computing capacity of the dedicated online platform owned by the CNDIPT

- Issues raised by data collection and GDPR

Another point of interest concerns the training needs analysis of school actors (especially teachers and school managers), of key actors at national level, in the field of monitoring and evaluation of public policies in the field of vocational training. It is useful to learn about experiences from other VET systems in carrying out training needs analysis and in developing training offers in this field, including thematic areas that are important to address, duration of programmes, type of delivery, profile of trainers, etc. Therefore, the peer review activity could document existing practices in increasing the competences of key actors in these areas of interest, providing a balanced view of top-down and bottom-up approaches. Any links to existing course resources are extremely useful.

More broadly, the peer reviewers are invited to reflect on **needed resources and tools** (including open education resources and digital tools) within the Romanian context. Understanding the conditions of success and having in-depth documentation of the needed conditions of transfer will support Romanian experts and decision-makers in identifying enabling factors, as well as foreseeing possible challenges/obstacles in the developments made for monitoring and evaluation of public policies in the field of vocational training. Views on the recent developments made in this areas will offer an "objective" view and this input, as explained in the introductory section of the report, will contribute to the clarification of the question: How can the existing mechanism to evaluate IVET policies be further improved, and how can it be applied to any policy in the field of IVET?

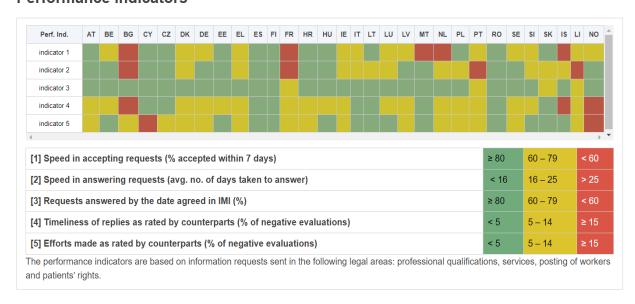
Key evaluation questions for the peer reviewers

- What recommendations can be provided regarding the selection of indicators, data collection, and presentation of indicators to ensure effective monitoring and evaluation of public policies in the IVET field?
- How can the existing mechanism to evaluate IVET policies be further improved, and how can it be applied to any policy in the field of IVET? How can it be used by VET providers to improve their performance?
- How can we improve the response rate for qualitative indicators collected through surveys on a digital platform?
- Which are the success factors regarding the establishment of systemic links between data collection, review and planning?

ANNEXES

1. Single Market Scoreboard in EU Member States, 2023

Performance indicators



Source: https://single-market-scoreboard.ec.europa.eu/enforcement-tools/imi_en

Structure of the population aged 15-64 by educational levels

	Total	Urban	Rural	Male	Female
2020	l				1
No. people (thousands)	12,611.8	6,960.3	5,651.4	6,405.6	6,206.2
Total	100%	100%	100%	100%	100%
Higher education (tertiary)	16.2%	25.0%	5.3%	15.0%	17.5%
Post-high school (non tertiary)	2.6%	3.8%	1.2%	2.0%	3.3%
Upper secondary (high school)	40.9%	44.3%	36.8%	39.9%	42.0%
Upper secondary (Professional					
School)	16.5%	13.2%	20.6%	20.8%	12.2%
Lower secondary	19.8%	11.3%	30.2%	18.6%	21.1%
Primary / None	3.9%	2.3%	5.8%	3.8%	4.0%
2021		I			
No. people (thousands)	12,387.5	6,780.7	5,606.8	6,287.1	6,100.3
Total	100%	100%	100%	100%	100%
Higher education (tertiary)	16.4%	25.3%	5.6%	14.9%	17.9%
Post-high school (non tertiary)	2.7%	4%	1.3%	2%	3.5%
Upper secondary (high school)	43.1%	46.2%	39.5%	41.9%	44.4%

Upper secondary (Professional					
School)	16.2%	12.9%	20.1%	20.8%	11.4%
Lower secondary	18.1%	9.6%	28.4%	16.9%	19.3%
Primary / None	3.4%	2.1%	5.1%	3.4%	3.6%

Source: Data calculated based on INS information, AMIGO Survey, 2021, 2022

According to INS statistics, out of the total of 19,201.7 thousand people resident in Romania in 2021, a number of 12,387.5 thousand are people aged 15-64, considered in the statistical data as people of working age. Of these:

- 8,126.8 thousand people represent the active population, which has completed some form of education and is available to carry out economic activities (which included: 7667.6 thousand people employed population and 459.2 thousand unemployed people);
- 4,260.7 thousand people represent the inactive population, made up of pupils and students, housewives, pensioners, beneficiaries of social aid; the value of the indicator is increasing compared to the previous year.

The active population decreased in 2021 by almost 600 thousand people, its distribution as a labour force being also affected by the pandemic context which determined the decrease in the number of employed people (by almost 605 thousand people) and the increase in the number of unemployed (by over 7 thousand people). Compared to the 5.2% share of unemployed people in 2020, in 2021 the share of the unemployed represented 5.7% of the active population.

The analysis of AMIGO data highlights a slight increase in the general level of education of the able-bodied population, by increasing the share of people who have graduated from higher education, post-secondary, high school. However, we note that almost a quarter of the population aged 15-64 continues to have a low level of education (secondary, primary or no completed primary school):

Structure of the population aged 15-64 by educational levels

	Total	Urban	Rural	Male	Female
2020		L	I		I
No. people (thousands)	12,611.8	6,960.3	5,651.4	6,405.6	6,206.2
Total	100%	100%	100%	100%	100%
Higher education (tertiary)	16.2%	25.0%	5.3%	15.0%	17.5%
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Upper secondary (high school)	40.9%	44.3%	36.8%	39.9%	42.0%
Upper secondary (Professional					
School)	16.5%	13.2%	20.6%	20.8%	12.2%
Lower secondary	19.8%	11.3%	30.2%	18.6%	21.1%
Primary / None	3.9%	2.3%	5.8%	3.8%	4.0%

2021					
No. people (thousands)	12,387.5	6,780.7	5,606.8	6,287.1	6,100.3
Total	100%	100%	100%	100%	100%
Higher education (tertiary)	16.4%	25.3%	5.6%	14.9%	17.9%
Post-high school (non tertiary)	2.7%	4%	1.3%	2%	3.5%
Upper secondary (high school)	43.1%	46.2%	39.5%	41.9%	44.4%
Upper secondary (Professional					
School)	16.2%	12.9%	20.1%	20.8%	11.4%
Lower secondary	18.1%	9.6%	28.4%	16.9%	19.3%
Primary / None	3.4%	2.1%	5.1%	3.4%	3.6%

Source: Data calculated based on INS information, AMIGO Survey, 2021, 2022

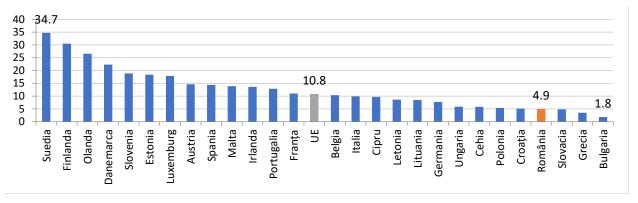
According to INS statistics, out of the total of 19,201.7 thousand people resident in Romania in 2021, a number of 12,387.5 thousand are people aged 15-64, considered in the statistical data as people of working age. Of these:

- 8,126.8 thousand people represent the active population, which has completed some form of education and is available to carry out economic activities (which included: 7667.6 thousand people employed population and 459.2 thousand unemployed people);
- 4,260.7 thousand people represent the inactive population, made up of pupils and students, housewives, pensioners, beneficiaries of social aid; the value of the indicator is increasing compared to the previous year.

Participation in lifelong learning

In the last decade, Romania failed to register consistent progress regarding **the participation of adults aged 25-64 in lifelong learning.** At the level of 2021, Romania occupies one of the last places among the countries of the European Union in terms of the participation of adults aged 25-64 in lifelong learning (Romania - 4.9%, compared to the EU average of 10.8%). It should be noted that compared to previous years, Romania registers a slight increase in the value of the indicator. However, Romania is still far from the European target for 2020 projected at a share of 15%.

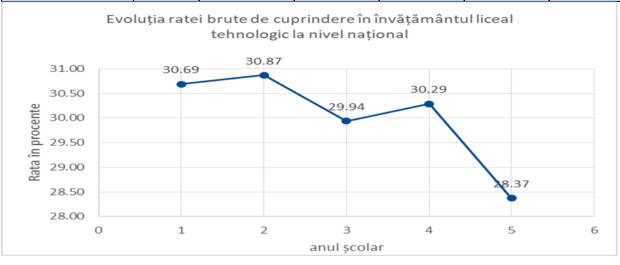
Participation of adults (25-64 years) in education and vocational training (during the 4 weeks before the investigation) – comparative data, 20 21



Source: EUROSTAT, 2022

IPT 31 - Gross enrollment rate in technological high school education

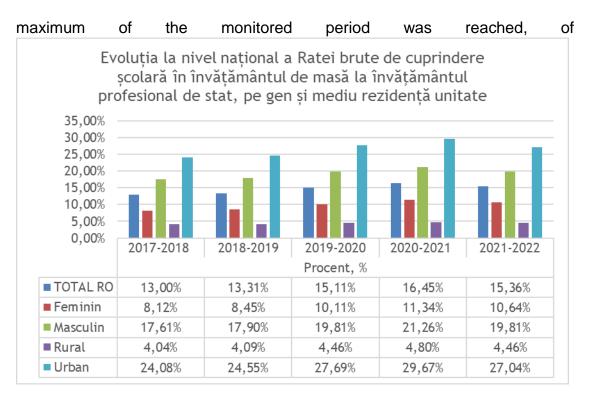
Gross enrollment rate in technological high school education by school years		2017-2018 TOTAL %	2018-2019 TOTAL %	2019-2020 TOTAL %	2020-2021 TOTAL %	2021-2022 TOTAL %
TOTAL	RO	30.69	30.87	29.94	30.29	28.37
TOTAL girls	RO	28.86	29.14	28.34	28.79	26.95
TOTAL RURAL	RO	5.59%	5.55%	5.25%	5.26%	5.02%



Source: Data calculated based on SIIIR

IPT 32. Gross enrolment rate in vocational education

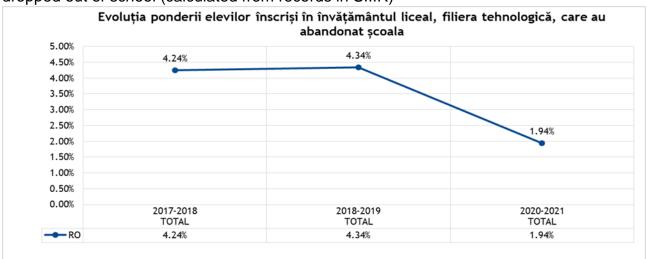
In the 2021-2022 school year, the Gross Enrollment Rate in vocational education, including dual, at the national level, reaches a value of 16.58% lower than the previous year when the



Source: Data calculated based on SIIIR

IPT 48 - School dropout rate in technological high school education

Evolution of the share of students enrolled in high school education, technological track, who dropped out of school (calculated from records in SIIIR)

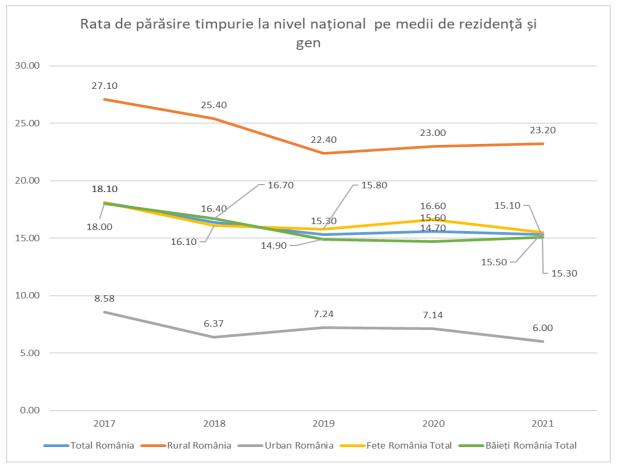


IPT 51 - Early school leaving (high school and vocational education, including dual)

The early school leaving rate is calculated by relating young people with a lower secondary education level or who have not completed their secondary education and who are not

17.74%.

following any form of education and vocational training, to the population resident in Romania



aged between 18 and 24.

From the data extracted from INS Tempo and then processed, it appears that the early school leaving rate for high school and vocational education, including dual, varies from 18.1% in 2017 to 15.3% in 2021, much higher than the European average of 9.70% in 2021.

Additional web resources

Pre-university Education Law:

https://edu.ro/sites/default/files/ fi%C8%99iere/Minister/2023/Legi educatie Romania educata/legi_monitor/Legea_invatamantului_preuniversitar_nr_198.pdf

- Memorandum Educated Romania national program: https://www.edu.ro/sites/default/files/ fi%C8%99iere/Romania%20Educata/Memorandum%20Romania%20Educata%202021.pdf
- •National Program for Recovery and Resilience, education component: https://www.edu.ro/PNRR
- National program for reducing school drop out: https://www.edu.ro/PNRAS
- •Support for children with special educational needs at Baccalaureate exam: https://edu.ro/sites/default/files/_fi%C8%99iere/Minister/2022/inv.%20preuniversitar/note_proceduri/Procedura_eqalizare_sanse_examene_nationale_ENVIII_Bac_2022.pdf